**Purpose/Background:** Blood and Marrow Transplant is a highly specialized area of nursing that requires a unique set of clinical and assessment skills. Due to high turn over and the influx of new graduates and inexperience Blood and Marrow Transplant nurses, our unit implemented a developmental plan and daily evaluation form for all new hires. The purpose of this form is to foster ongoing learning after the orientation period is completed. This form also facilitates communication and the development of critical thinking by coaching the new hire to work closely with either the charge nurse or a member of the management team.

The management team also developed a critical question tool to be used by the charge nurse. The purpose of this tool is to assist the charge nurse in asking open questions to help the new hire increase their knowledge and clinical assessment of the Blood and Marrow Transplant recipient. **Conclusion:** Both the charge nurses and the new hires feel the daily evaluation form has helped the new hires to provide safer and more efficient care. They also feel it has helped to provide ongoing education regarding the unique needs of the BMT patients. Since the implementation, the management team has noticed the communication between the charge nurse and the new hire has helped to not only organize their daily tasks; but also, to see how those tasks fit into the bigger picture.

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### INFUSION CONFUSION: HOW TO TEACH THE ART OF HPC INFUSION

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Blood and marrow transplant centers are facing a unique educational challenge due to staff turnover rates, increasing regulations from accrediting bodies and a greater number of novice nurses caring for complex hematopoetic progenitor cell (HPC) patients. These issues present a safety risk to this patient population and an educational challenge to transplant centers.

The Blood Marrow Transplant Nursing Educational Committee (BMTNEC) at the Medical University of South Carolina identified the need to provide pertinent information on HPC infusion in a visual format that is easily accessible and presented in a timely manner. A plan was devised to develop instructional media which parallels current standards of practice in both the adult and pediatric HPC programs. The BMTNEC reviewed policies, collaborated with adult and pediatric nursing staff, and re-evaluated previous quality measures, in order to identify necessary educational topics.

The goal of the project was to provide both novice and experienced nurses an easily accessible, brief instructional video of a procedure not commonly performed. This poster presentation describes the development and utilization of a five minute, step by step, HPC infusion instructional DVD accessible at any institutional computer terminal by clicking on a desktop icon.

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### SUPPORTING THE SCLERODERMA PATIENT THROUGH A COMPLEX TOTAL BODY IRRADIATION PREPARATIVE REGIMEN WITH AUTOLGOUS STEM CELL SUPPORT: A MULTIDISCIPLINARY APPROACH

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Scleroderma or systemic sclerosis is an autoimmune disorder where there is thickening of the connective tissue, which can cause damage to internal organs, such as the heart, lungs & kidneys. The symptoms of scleroderma can be mild to life threatening. Due to the severity of symptoms, treatment options for scleroderma are varied. Treatment options are often managed based upon symptoms displayed & organ involvement. Presently, with the treatment options available, none prevent advancement of the disease process & reversal of organ damage.

Researchers have brought forth the idea that as an autoimmune disorder, scleroderma may be effectively treated by looking at the immune system. This idea was conceived when it was determined that some patients who have received stem cell transplant for other autoimmune disorders have remained in long term remission after transplant. With this said, this concept has led to the development of the SCOT (Scleroderma: Cyclophosphamide or Transplant) Study. This multicenter clinical trial compares the potential benefits of stem cell transplantation versus high dose monthly cyclophosphamide. As principle investigator & confirmed transplant center, Duke University Health System focuses on the patient that is randomized to the transplant arm.

With the emergence of this study, adult stem cell transplant is changing as we historically know it. The scleroderma patient has never been exposed to oncology treatments, such as chemotherapy and radiation therapy. They are unfamiliar with potential side effects of this treatment regimen. As well, the total body irradiation (TBI) treatment on this protocol is more complex than the conventional therapy traditionally used to treat oncology patients undergoing stem cell transplantation. As a program, there has been a collaborative effort between the physician team, nursing team, stress management and radiation therapy to prepare the patient mentally, physically & emotionally for the transplant process. This abstract will present strategies implemented to prepare a patient with a non-oncological diagnosis for an intense treatment regimen.

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### METHODOLOGICAL CONSIDERATIONS IN PHYSICAL AND PSYCHOSOCIAL INTERVENTION STUDIES IN PATIENTS UNDERGOING HEMATOPOIETIC STEM CELL TRANSPLANTATION (SCT)

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**Aim:** Several studies conclude that patients undergoing SCT experience physical, psychological and social deficits during and after SCT, recommending intervention studies as a means to minimize these. Even though only a few intervention studies are published, they can significantly enhance our knowledge in the improvement of nursing care. Based on the literature and the experience from two ongoing intervention studies, we would like to discuss some of the limitations and challenges when carrying out intervention studies in this patient group. **Discussion of Design and Methods:** Sample size: Nursing led intervention studies are often single centre studies with a limited number of possible eligible patients. Exclusion due to study design or attrition rates due to treatment complications/death can affect the total number of patients capable of completing the study. Measurement of the effect of the intervention: Many studies use quantitative methods to measure physical and psychosocial performance before and after intervention. Most of these questionnaires require a considerable number of patients to show a significant effect of the intervention. As a result, the effect may not be evident when using quantitative methods alone, but may benefit by adding qualitative methods like semi-structured interviews, diaries etc. Control group bias: The intervention study may affect the control group as well, simply because the focus of the intervention is highlighted in the control group's perception and thereby reflected in their actions. Reproducibility and validity: Intervention studies are often performed by a special research nurse who conduct all elements of the intervention, making it difficult to separate the effect of the program and the personality of and relationship with the research nurse unless more objective measures are used. Furthermore, not all intervention programs are theoretically based and described, making it difficult to reproduce, validate and implement the program in other SCT settings. **Conclusion:** In order to gain knowledge in improving patient care during SCT, intervention studies are requested. Intervention studies often include a limited number of patients and the effect of an intervention study may not be shown using quantitative methods alone, but may also include qualitative methods. Intervention studies may influence the control groups' behaviour. It is important to be able to reproduce and validate intervention studies in other SCT settings.